

**The Claims**

1. (Previously presented) A data mining system comprising:  
a client machine; and  
a service broker operable to:
  - receive a consultation request from the client machine through a computer network, the consultation request associated with data for consulting a Neugent, the Neugent being distinct from the client machine;
  - forward the consultation request to the Neugent to invoke a consultation of the Neugent, the Neugent operable to perform a predictive analysis with respect to the data for consulting the Neugent that is associated with the consultation request; and
  - forward to the client machine through the computer network a result object returned by the Neugent, the result object comprising a prediction determined by the Neugent with respect to the data for consulting the Neugent.
2. (Previously presented) The system of claim 1, wherein the consultation request comprises the data for consulting the Neugent.
3. (Previously presented) The system of claim 2, wherein the Neugent is operable to perform the predictive analysis of the data comprised by the consultation request.
4. (Previously presented) The system of claim 1, wherein the consultation request comprises identification of a source of the data for consulting the Neugent.
5. (Previously presented) The system of claim 4, wherein the Neugent is operable to perform the predictive analysis of input data obtained from the source identified in the consultation request.

6. (Previously presented) The system of claim 1, wherein the service broker is operable to:

receive a training request from the client machine, the training request comprising training data; and

forward the training request comprising the training data to the Neugent to invoke training of the Neugent with the training data.

7. (Previously presented) The system of claim 6, wherein the training request comprises a parameter specifying a ratio by which to split the training data between training the Neugent and testing the Neugent.

8. (Previously presented) The system of claim 6, wherein the service broker is operable to forward to the client machine a training result object returned by the Neugent after training of the Neugent.

9. (Previously presented) The system of claim 1, wherein the Neugent is operable to:

group training data patterns into clusters, each cluster corresponding to a group of similar data patterns; and

predict a probability of membership of an input pattern to a selected group, the data associated with the consultation request comprising the input pattern.

10. (Previously presented) The system of claim 1, wherein the Neugent is operable to:

group training non-numeric patterns into clusters, each cluster corresponding to a group of similar non-numeric patterns; and

predict a probability of membership of an input non-numeric pattern to a selected group, the data associated with the consultation request comprising the input non-numeric pattern.

11. (Previously presented) The system of claim 1, wherein the Neugent is operable to:

form a cluster model by grouping training data patterns into a plurality of clusters, each cluster corresponding to a group of similar data patterns and determining for each cluster probabilities of transition from the cluster to each of the other clusters; and

predict a probability of an event occurring by applying an input pattern to the cluster model, the data associated with the consultation request comprising the input pattern.

12. (Previously presented) The system of claim 1, wherein the Neugent is operable to:

form an input-output model associated with a set of training data patterns; and predict an output value by applying the model to an input pattern, the data associated with the consultation request comprising the input pattern.

13. (Previously presented) The system of claim 1, wherein the Neugent is operable to:

form rules associated with corresponding relationships in a set of training data patterns; and

predict an outcome by applying the rules to an input pattern, the data associated with the consultation request comprising the input pattern.

14. (Previously presented) The system of claim 1, wherein the Neugent comprises a functional-link net.

15. (Previously presented) The system of claim 1, wherein the service broker comprises a remote server.

16. (Previously presented) The system of claim 15, wherein the consultation request comprises an Extended Markup Language document.

17. (Original) The system of claim 15, wherein the Neugent is server-side.

18. (Previously presented) A method for providing to a remote client machine a service to consult a Neugent, comprising:

receiving a consultation request from the remote client machine through a computer network, the consultation request associated with data for consulting the Neugent, the Neugent being distinct from the remote client machine;

forwarding the consultation request to the Neugent to invoke a consultation of the Neugent, the Neugent operable to perform a predictive analysis with respect to the data for consulting the Neugent that is associated with the consultation request; and

forwarding to the remote client machine through the computer network a result object returned by the Neugent, the result object comprising a prediction determined by the Neugent with respect to the data for consulting the Neugent.

19. (Previously presented) A computer system for providing to a remote client machine a service to consult a Neugent, comprising:

a program storage device readable by the computer system, tangibly embodying a program of instructions; and

a processor operable to execute the program instructions to:

receive a consultation request from the remote client machine through a computer network, the consultation request associated with data for consulting the Neugent, the Neugent being distinct from the remote client machine;

forward the consultation request to the Neugent to invoke a consultation of the Neugent, the Neugent operable to perform a predictive analysis with respect to the data for consulting the Neugent that is associated with the consultation request; and

forward to the remote client machine through the computer network a result object returned by the Neugent, the result object comprising a prediction determined by the Neugent with respect to the data for consulting the Neugent.

20. (Canceled)

21. (Canceled)

22. (Previously presented) A method for providing to a remote client machine a service to train a Neugent, comprising:

receiving a train request from the remote client machine through a computer network, the train request associated with training data for training the Neugent, the Neugent being distinct from the remote client machine;

forwarding the train request to the Neugent to invoke training of the Neugent, training of the Neugent comprising causing the Neugent to perform a data analysis of the training data; and

forwarding to the remote client machine through the computer network a training result object returned by the Neugent, the training result object comprising a data classification mechanism operable to facilitate performance of a predictive analysis by the Neugent.

23. (Previously presented) A computer system, comprising:

a program storage device readable by the computer system, tangibly embodying a program of instructions; and

a processor operable to execute the program instructions to:

receive a train request from the remote client machine through a computer network the train request associated with training data for training the Neugent, the Neugent being distinct from the remote client machine;

forward the train request to the Neugent to invoke training of the Neugent, training of the Neugent comprising causing the Neugent to perform a data analysis of the training data; and

forward to the remote client machine through the computer network a training result object returned by the Neugent, the training result object comprising a data classification mechanism operable to facilitate performance of a predictive analysis by the Neugent.

24. (Canceled)

25. (Canceled)

26. (Previously presented) The method of claim 18, wherein the consultation request comprises the data for consulting the Neugent.

27. (Previously presented) The method of claim 26, wherein the Neugent is operable to perform the predictive analysis of the data comprised by the consultation request.

28. (Previously presented) The method of claim 18, wherein the consultation request comprises identification of a source of the data for consulting the Neugent.

29. (Previously presented) The method of claim 28, wherein the Neugent is operable to perform the predictive analysis of input data obtained from the source identified in the consultation request.

30. (Previously presented) The method of claim 18, comprising:  
receiving a training request from the remote client machine, the training request comprising training data; and  
forwarding the training request comprising the training data to the Neugent to invoke training of the Neugent with the training data.

31. (Previously presented) The method of claim 30, wherein the training request comprises a parameter specifying a ratio by which to split the training data between training the Neugent and testing the Neugent.

32. (Previously presented) The method of claim 30, comprising forwarding to the remote client machine a training result object returned by the Neugent after training of the Neugent.

33. (Previously presented) The method of claim 18, comprising:  
grouping, at the Neugent training data patterns into clusters, each cluster corresponding to a group of similar data patterns; and  
predicting, at the Neugent, a probability of membership of an input pattern to a selected group, the data associated with the consultation request comprising the input pattern.

34. (Previously presented) The method of claim 18, comprising:  
grouping, at the Neugent, training non-numeric patterns into clusters, each cluster corresponding to a group of similar non-numeric patterns; and  
predicting, at the Neugent, a probability of membership of an input non-numeric pattern to a selected group, the data associated with the consultation request comprising the input non-numeric pattern.

35. (Previously presented) The method of claim 18, comprising:  
forming, at the Neugent, a cluster model by grouping training data patterns into a plurality of clusters, each cluster corresponding to a group of similar data patterns and determining for each cluster probabilities of transition from the cluster to each of the other clusters; and  
predicting, at the Neugent, a probability of an event occurring by applying an input pattern to the cluster model, the data associated with the consultation request comprising the input pattern.

36. (Previously presented) The method of claim 18, comprising:  
forming, at the Neugent, an input-output model associated with a set of training data patterns; and  
predicting, at the Neugent, an output value by applying the model to an input pattern, the data associated with the consultation request comprising the input pattern.

37. (Previously presented) The method of claim 18, comprising:  
forming, at the Neugent, rules associated with corresponding relationships in a set of training data patterns; and  
predicting, at the Neugent, an outcome by applying the rules to an input pattern, the data associated with the consultation request comprising the input pattern.

38. (Previously presented) The method of claim 18, wherein the Neugent comprises a functional-link net.

39. (Previously presented) The method of claim 18, wherein the method is performed at a remote server.

40. (Previously presented) The method of claim 39, wherein the consultation request comprises an Extended Markup Language document.

41. (Previously presented) The method of claim 39, wherein the Neugent is server-side.

42. (Previously presented) Software for providing to a remote client machine a service to consult a Neugent, the software being embodied in a computer-readable medium and when executed operable to:

receive a consultation request from the remote client machine through a computer network, the consultation request associated with data for consulting the Neugent, the Neugent being distinct from the remote client machine;

forward the consultation request to the Neugent to invoke a consultation of the Neugent, the Neugent operable to perform a predictive analysis with respect to the data for consulting the Neugent that is associated with the consultation request; and

forward to the remote client machine through the computer network a result object returned by the Neugent, the result object comprising a prediction determined by the Neugent with respect to the data for consulting the Neugent.

43. (Previously presented) Software for providing to a remote client machine a service to train a Neugent, the software being embodied in a computer-readable medium and when executed operable to:

receive a train request from the remote client machine through a computer network the train request associated with training data for training the Neugent, the Neugent being distinct from the remote client machine;

forward the train request to the Neugent to invoke training of the Neugent, training of the Neugent comprising causing the Neugent to perform a data analysis of the training data; and

forward to the remote client machine through the computer network a training result object returned by the Neugent, the training result object comprising a data classification mechanism operable to facilitate performance of a predictive analysis by the Neugent.